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ABSTRACT

The factors related to teaching style preference of the Ohio Cooperative Extension Service (OCES) faculty and program were measured by the Principles of Adult Learning Scale (PALS). The study also looked at two additional measurements predictive of teaching behavior: sensitivity and inclusion, as measured by the Van Tilburg/Heimlich Sensitivity/Inclusion Scale. Information was gathered through a questionnaire based on these two instruments that was developed and mailed to 609 OCES faculty and program staff; response rate was approximately 75 percent (454). The study found that OCES educators appear to have limited knowledge of adult education principles and practices and that the findings of the two assessment instruments were not correlated in any practically significant way. A number of recommendations were made: improve teacher support and attitude; increase staff knowledge of adult education principles and practices; improve the number of adult education courses that staff take; help staff focus on learner-centered styles as well as their preferred teacher-centered styles; assist staff in making needed changes; and develop a mentoring system. (Contains 15 references.) (KC)

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Summary of Research

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Factors Related to Teaching Style Preference of Ohio Cooperative Extension Service Faculty and Program Staff

Brenda S. Seevers and Richard W. Clark

Introduction

The Cooperative Extension Service is one of the world's largest adult education organizations. According to Boone, (1985, p. 265), "the Cooperative Extension Service...is the world's largest publicly supported informal adult education and development organization." The Cooperative Extension Service's unique network provides professional educators in almost every U.S. county in all states to provide linkages for dissemination of research-based knowledge to clientele. Through it's structure and organization, it provides a system for lifelong learning (Prawl, Medlin, and Gross, 1984, p. 26).

From it's very beginning, the Cooperative Extension Service philosophy has been one of advocating positive, lifelong, individual and behavioral change. Cooperative Extension workers are, primarily, educators of adults. They instruct adult audiences through formal group instruction as well as small group and one-to-one consultations. Practical research relevant to the needs and concerns of constituents is conducted and disseminated at all levels of the organization. The Cooperative Extension Service is in the forefront of lifelong learning and behavioral change for the adult learner. Based on the Extension mission, the assumption could be made that Extension educators possess the knowledge and skills needed to anticipate and recognize adult needs and direct learning activities to adequately address those needs. Believing this assumption, the principles of adult education as the foundation for learning should be evident in the teaching styles of Cooperative Extension faculty and program staff. The role of the teacher/educator has more recently become a focus in adult education literature. While no consistent definition of teaching style has emerged, it is commonly believed that an educator will, over time, perform to their strengths (Heimlich, 1990). Knowing one's strengths and how to adapt them to maximize student learning should be the goal of every adult educator.

Related Literature

Literature related to the adult learner has sought to explain the behaviors of both the learner and the teacher in terms of style. Style refers to a person's pervasive qualities that persist even though situation conditions may change (Conti & Welborn, 1986, p. 1) It is their belief that most traits associated with style are not congenital; but rather they develop over time, can change slowly, and reflect other characteristics of the person. According to Fisher and Fisher (1970,

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p. 251), "the idea of teaching style is quite different from the method of instruction used by a teacher. It refers to a classroom mode, a pervasive way of approaching learners that might be consistent with several methods of teaching."

Numerous studies have been conducted which explore learning styles and appropriate methods for the many different learning styles, with the purpose being to establish a linkage between individual preference and teaching methods. Cross (1979), refers to learning style as, "the characteristic ways each individual collects, organizes, and transforms information into useful knowledge.

More recently in adult education, the role or behaviors of the teacher/practitioner has become a focus. Yet, unlike learning styles, the research identifying teaching styles is limited.

According to Fisher and Fisher (1979, p. 254), the teaching style label is a hypothetical construct which is associated with various identifiable sets of teacher behavior and is a useful tool "to understand and perhaps explain important aspects of the teaching-learning process."

The definitions of teaching style found in the literature are many and varied, and while there are common threads that can be detected, no one consistent definition emerged. According to Heimlich (1990), there is a shared concept that is clear. That concept states (p. 30), "educators will, for whatever reasons, tend to perform over time to their strengths, and that if left to their own devices, an educators' performance activities will tend to utilize their strengths." Conti (1990) concludes that ones teaching style is consistent, over all traits and qualities. The classifications, taxonomies categories and traits discussed in the literature are a means of labeling and identifying those strengths and characteristics. It is important to note that judgements regarding the "goodness" of ones style should be avoided. Axelrod (1970) indicates that within every style there is likely to be both good and poor educators. Identifying one's style is a recognition of what is - strengths and tendencies. An educator's style is a composite of who he/she is, his/her personality, experiences, education, culture and environment, which in total determine an individual's overall life philosophy (Conti, 1990). Understanding ones style is useful to the educator not only in understanding his/her own limitations and strengths, but also in defining what, if any, inconsistencies exist between his/her style and philosophy, and what changes or adaptations in method and/or philosophy are needed. Rather than picking a style from the literature and seeking to emulate it, the educator should strive for consistency within his/her natural style which stems from a life philosophy (Conti, 1990).

Purpose and Objectives

If teachers are to know if style really makes a difference in student learning, then they must first identify that style and then critically reflect on their own behaviors in the learning environment related to that style.

The focus of this study was to determine the factors related to teaching style preference of the Ohio Cooperative Extension Service (OCES) Faculty and Program Staff as measured by the Principles of Adult Learning Scale (PALS) (Conti, 1978). This study also looked at two additional measurements predictive of teaching behavior: sensitivity and inclusion, as measured by the Van Tilburg/Heimlich Sensitivity/Inclusion Scale (Van Tilburg/Heimlich, 1990). The Van Tilburg/Heimlich Scale, a new contribution to the discipline of adult education, measures the constructs of Sensitivity - how aware the instructor is to the needs

and concerns of his/her students, and Inclusion - the extent to which the instructor involves students in planning and designing their own learning experiences. Also examined were the respondents' attitudes toward their roles as an adult educator and their knowledge regarding basic adult education principles and practice.

Variables in the study:

The dependent variable in this study was the total score on the PALS - measuring teaching style preference. Antecedent characteristics included: (1) attitude toward perceived role as an adult educator, (2) knowledge of basic adult education principles and practices, (3) sensitivity of the instructor to the students' needs, (4) inclusion by the instructor of students in the design of their own learning experiences, (5) major program area of study, (6) current professional position, (7) number of years employed, (8) highest educational degree, (9) academic major in highest educational degree, (10) number of adult education classes taken, (11) teaching experience outside of the Cooperative Extension Service, (12) gender, and (13) age.

Objectives of the study:

Specific objectives were as follows:

1. To describe the faculty and program staff of the Ohio Cooperative Extension Service on all characteristics.
2. To describe the relationships between selected antecedent characteristics and teaching style.
3. To describe the relationships between all antecedent characteristics and the dependent variable-teaching style preference.
4. To determine the best predictor(s) of the dependent variable, "teaching style preference as measured by PALS."

Methodology

The study was descriptive-correlational in nature. The target population was 609 Ohio Cooperative Extension Service faculty and program staff employed as of January 1, 1990. These professionals consisted of 175 state specialists/administrators/administrative professionals, 33 district specialists/administrators, 209 county extension agents, 41 extension associates, 69 program assistants, and 82 Expanded Food and Nutrition Program (EFNEP) educators. The study was a census.

Instrumentation

A mail questionnaire, developed by the researchers was administered. The questionnaire had five sections. Section I collected information from subjects related to their attitude toward their roles as an adult educator. A Likert-type scale with 15 items was used. Values ranged from 1 = strongly disagree to 5 = strongly agree. The values of each score were summed and a mean score was determined.

Section II of the instrument measured subjects' level of knowledge and understanding related to principles of adult learning. Subjects were asked to agree or disagree by circling the appropriate response on ten statements related to the practice of adult education. The content of the ten statements was taken from the literature available in adult education.

Section III and IV of the instrument used two different scales to measure subjects perceptions of their behavior or practice of teaching style of adults. A modified version of the Principles of Adult Learning Scale (PALS) was used to assess teaching style. An individual's score on PALS was used as the dependent variable. The PALS is a 44-item Likert-type scale requiring respondents to indicate the frequency with

which they practiced the actions described (0 = Never, 5 = Always). Scores on PALS range from 0 - 220. A higher score on PALS indicates a learner-centered approach, a lower score indicates a teacher-centered approach. The normed mean score for the instrument is 146. In order to identify the specific classroom behaviors that make up an individual's teaching style, PALS is divided into seven factors or constructs. An individual may assess his/her teaching style related to each of the seven constructs as well as the total PALS.

The second measurement of the subjects' teaching style was assessed using the Van Tilburg/Heimlich Sensitivity-Inclusion Instrument. The Van Tilburg/Heimlich measure is a relatively new contribution to the discipline of adult education. Existing data pertaining to its' measurement of teaching style is limited. Sensitivity measures how aware the instructor is to the needs and concerns of his/her students. Inclusion measures to what extent the instructor involved his/her students in planning and designing their own learning experiences. Two Thurstone equal- appearing interval scales, containing 11 items each, were used. Respondents were asked to check all of the items that they agreed with. Each individual received two scores: a sensitivity score and an inclusion score. The mean score between one and eleven was determined for each respondent on each scale. The scores, when placed on a high/low continuum and crossed with one another, create quadrants of a two-by-two matrix. The placement on the matrix provided each individual with a single teaching style indicator. The quadrant names are low (inclusion), low (sensitivity), EXPERT; low-high, PROVIDER; high-low, FACILITATOR, and high-high, ENABLER. An eleven point scale, resulted in the creation of an ambiguous area called the "neutral zone." Individuals scoring in the range of 6.0 - 7.9 fell in the "neutral zone" category. According to Van Tilburg and Heimlich (1990), "placement in this location on the matrix, indicates an uncertainty in preference or lack of clarity in predictability in performance, but clarity on inculturated socially desirable teaching behavior."

Section V of the instrument measured selected demographic characteristics including: major program area of responsibility, current professional position in OCES, number of years employed by CES, highest educational degree obtained, academic major in highest educational degree, formal instruction in adult education taken, professional teaching experience outside of CES, gender and age.

Reliability and Validity

A panel of experts in adult education, extension education, and measurement deemed the entire instrument content and face valid. The Cronbach's Alpha coefficients were calculated for the measurement of attitude. A coefficient of .69 was achieved on the 15 item summated scale. Knowledge was measured using a 10 item dichotomous scale (agree/disagree). The Kuder-Richardson 20 (KR20) test for internal consistency was used. An alpha level of .72 was achieved. The retest method was used to determine reliability of the PALS instrument. The data generated from the test and retest were used to calculate a Pearson correlation of .92. The Van Tilburg/Heimlich Sensitivity-Inclusion Measure was deemed reliable using the parallel forms procedure. For this measure, the same population (n = 16) completed similar forms of the instrument within a three weeks of one another. A coefficient of equivalence (.72) was produced when the two sets of scores obtained were correlated.

Data Collection

Procedures outlined in the Total Design Method for Surveys recommended by

Dillman (1978) were used to collect data in the winter of 1990. One follow-up was conducted and a final response rate of 74.9 percent (n = 454) was obtained. Ten percent of the non-respondents from each of the professional position categories were randomly selected and interviewed by telephone. Differences between respondents and non-respondents were examined through the use of t-tests. The t-tests yielded no significant differences between groups. Miller and Smith (1983) suggest that since the data were similar, they can be pooled and generalized to the population.

Data Analysis

Descriptive statistics were first used to summarize and organize the data. The first objective of this study was to describe the faculty and program staff of the Ohio Cooperative Extension Service on selected characteristics. Frequencies, percentages, measures of central tendency and variability were used to describe the data. A second purpose of the study was to determine the extent that relationships exist between selected characteristics. Measures of Association were used to determine the nature and strength of the relationships between variables. Davis' (1971) conventions for describing measures of association were used. Stepwise multiple regression was used to determine the best predictor(s) of the dependent variable. According to Warmbrod (1988, p. 13), "stepwise regression is most appropriately used when the research goal is primarily predictive rather than explanatory." Characteristics entered into the stepwise regression model were selected based on the size of the correlation coefficient. The total R^2 was computed to determine the amount of variance accounted for by the linear combination of antecedent characteristics.

Findings

Objective One

Knowledge

Ohio Cooperative Extension Service employees exhibited low levels of knowledge related to basic adult education principles and practices. The range of scores for this measure was 0 (none) to nine. The mean scores for all respondents was 4.81. A total of 69.5 percent received a score of five or lower, indicating that they had responded incorrectly to at least 50 percent of the statements. A limitation of this measure is the recognition that a ten item test is not a comprehensive measure of knowledge. However, what was addressed in the ten items were the basic principles, practices, beliefs, and assumptions found in the current literature. Based on the overall scores achieved, OCES employees appear to have a limited understanding and knowledge of these basic principles and practices of adult education.

Attitude

Attitude toward being an adult educator was found to be neutral to slightly positive. Mean scores were calculated based on a one to five Likert-type scale with 1 = Strongly Disagree and 5 = Strongly Agree. A score of three would be average or neutral. All individuals scored in the three to four range. The mean score was 3.51. Overall, the majority of OCES faculty and program staff exhibited a neutral to slightly positive attitude toward perceiving their role to be an adult educator.

Perceived Teaching Style-Principles of Adult Learning Scale (PALS)

PALS provides an indicator of overall teaching style and strength of commitment

to that style. The normed mean for PALS is 146 with a standard deviation of 20. Ohio Cooperative Extension faculty and program staff scored slightly lower than the average with a mean score of 133.4 and a standard deviation of 14.4. A low score, those below 146, suggest a tendency toward a teaching-centered approach and a score above 146 supports the collaborative or learner-centered approach. The scores on PALS ranged from a low of 90 to a high of 176. A total of 69 percent of all respondents fell in the category of one standard deviation of the norm mean for the instrument. PALS can also be divided into seven factors that identify specific elements that make up teaching style. They are: (1) Learner-Centered Activities, (2) Personalizing Instruction, (3) Relating to Experience, (4) Assessing Student Needs, (5) Climate Building, (6) Participation in the Learning Process; and (7) Flexibility for Personal Development. OCES scores for six of the seven factors that make up an individual's teaching style also fell below the normed average for the instrument. OCES employees scored slightly above average on the construct of "involving learners in the learning process."

Sensitivity and Inclusion

The majority of OCES faculty and program staff scores fell in the "neutral zone." Van Tilburg and Heimlich (1990) postulate that scores in this location on the matrix indicate an uncertainty in preference and a lack of clarity or predictability in performance but clarity on uncultured socially desirable behavior. Individuals may be reporting what they know to be the desired belief but may not be actually translating it into behavior.

Selected Demographics

The majority of OCES employees (56.4 percent) reported their academic major for their highest educational degree in a technical subject matter and not in the field of education. More than 52 percent of employees had not taken formal classes in the area of adult education. The number of individuals reporting prior teaching experience outside of the Cooperative Extension Service was only slightly lower than those with no experience, however of those with prior experience, a significant percentage was with youth and not adult audiences.

Objective Two

Relationships between the antecedent characteristics of attitude, knowledge, sensitivity and inclusion and selected demographic variables were explored. Davis's (1971) Measures of Association were used to describe the relationships found. In all cases, relationships were found to be of low or negligible association.

Objective Three

Objective three of this study sought to explore relationships that existed between selected antecedent characteristics and the dependent variable, "the extent to which behaviors associated with teaching adults are learner-centered or teacher-centered as measured by the Principles of Adult Learning Scale." Relationships were explored between the selected antecedent characteristics and the total or summated scale on PALS, as well as each of the seven factors or elements that comprise the total PALS score. Relationships found were described using Davis' Measures of Association (1971). All relationships were found to be negligible or low association (range = .009 - .280).

All relationships between the total PALS scores and the antecedent characteristics were found to be positive. Although all of the relationships were at the negligible or low association levels, the characteristics of

attitude, sensitivity, inclusion, number of adult education classes and academic major exhibited stronger relationships than other characteristics measured. The literature is supportive of these findings, however, it was surprising, based on the literature, that the strength of the relationship was not stronger. Personal factors related to background and environment, including education, previous experience, and professional training, including the number of adult education classes taken have been found to be significantly related to teaching style preference (Robinson, 1979; Demming, 1986; Douglass, 1982; Pearson, 1980; and Franklin, 1989). Attitude was also more highly correlated with teaching style preference. The literature also supports that attitude, beliefs, and philosophical orientation are an integral part of an individuals preferred teaching style (Franklin, 1989; Boone, 1985; Conti, 1985; and Conti and Welborn, 1986).

A review of selected characteristics indicate that OCES faculty and program staff are more alike than different...Ohio Cooperative Extension Service faculty and program staff were found to be very similar on almost all characteristics analyzed. Based on those minimal differences, however, a profile of individuals who were most likely to adopt the collaborative teaching-learning mode and those who tendencies were more teacher-centered were found. Teacher-centered individuals were more likely to be in program areas categorized as other (administrative program professionals, i.e. computer support personnel), in a paraprofessional role, employed four to seven years, under the age of 30 and possessing as the highest degree a high school education or equivalent. Learner-centered individuals were more likely to work as a district or state specialist/administrator in the home economics program area, employed between eight and fifteen years, are between the ages of 41-50 and possess a master's degree as their highest degree.

Objective Four

Stepwise multiple regression was used to address objective four. Four antecedent characteristics were found to be the best combination of variables to predict the dependent variable, "teaching style preference as measured by PALS." In order of most to least variance accounted for, they were sensitivity (8.9%), inclusion (3.6%), number of adult education classes taken (1.9%), and attitude (1.2%). However, the total amount of variance accounted for by the linear combination of the four characteristics was 16 percent ($R^2 = .155$) (See Table 1). Sensitivity, which accounted for nine percent of the variance, accounted for the greatest percent of the total variance.

Summary of Findings

1. Ohio Cooperative Extension Service educators appear to have limited knowledge of adult education principles and practices.
2. Despite findings in the literature to the contrary, it appears that none of the variables in the study were related to the others in a way that would represent practical significance. (All relationships were low to negligible).
3. Only scores on the sensitivity part of the Van Tilburg/Heimlich Scale explained any sizable amount of variance in the PALS score (8.9%). Additional variables combined accounted for only 6.5% of the explained variance of the regression equation.
4. The Van Tilburg/Heimlich Sensitivity-Inclusion Scale scores were not correlated to the PALS scores in a way that represents practical significance. (Low to negligible relationships).

This would indicate that the two instruments were probably not measuring the same construct of preferred teaching style.

Table 1

REGRESSION OF TOTAL PALS SCORE ON SENSITIVITY, ATTITUDE, INCLUSION AND TOTAL ADULT EDUCATION CLASSES TAKEN. (N = 335) (STEPWISE ENTRY)

Variables	R^2	R^2 change
Sensitivity	.089	.089
Inclusion	.125	.036
Total Adult Education Classes	.143	.019
Attitude Score	.155	.012

Implications and Recommendations

Malcolm Knowles (1970) suggests that the teacher is the single most important variable influencing the dynamics of the learning situation. Past research efforts have focused on the learning style of students, teaching methods, and adaption of teaching methods to student learning styles. In the past decade, there has been an emergence of the need to understand the inherent style of the educator and the impact that style has on learner outcomes. The measurement and understanding of ones' style provides not only an external measure of classroom effectiveness, but also serves as an internal assessment of values, beliefs and philosophical orientation.

The Cooperative Extension Service is the world's largest informal adult education organization. Daily, Ohio Cooperative Extension Service faculty and program staff provide educational programs and learning opportunities for the clientele it serves. The findings of this study can be used to assist individuals in the OCES organization in making decisions regarding their personal style, including decisions regarding personal development opportunities. Additionally, the findings should be made available to aid administrators in decision-making, to assist in developing guidelines and policies for hiring and retention, and for the enhancement of personal and professional development of its employees. Specific recommendations include:

1. Attitudes for OCES employees were found to be neutral to slightly positive. The organization can, through mission, philosophy and action send messages to support and reward good teaching. Support and encouragement should be provided through opportunities (financial as well as time commitments) for personal as well as professional growth. Recognition and reward should be provided for individuals demonstrating not only "good teaching," but creative and innovative approaches to teaching-learning. Attitude change must come from within. What individuals believe to be true about themselves represents a major influence on attitude.

If an Extension employee believes that the organization is supportive and committed to enhancing adult education and recognizes and regards behavior consistent with that mission, attitude can be positively influenced.

2. Ohio Cooperative Extension Service faculty and program staff appear to have limited knowledge of adult education principles and practices. The literature supports that there is a relationship between education, number of formal adult education classes taken, highest educational degree and professional position. Current employees should be encouraged and provided opportunities to improve their knowledge levels through personal development as well as in-service training opportunities by the organization.
3. Professional training, including the number of formal adult education classes taken, was also a predictor in determining teaching style. The majority of OCES faculty and program staff had little or no formal training in adult education course work. Additionally, a review of the in-service training offered in the past five years show that information on working with adult audiences has only been briefly addressed. The Ohio Cooperative Extension Service should consider for hire and promotion, an individuals' formal training and course work in adult education.
4. OCES employees were found to be more teacher-centered than learner-centered in their approach to teaching style. It is important for individuals to understand that a preference or tendency toward one style or another is neither good nor bad. It is an assessment of what is. The literature on adult teaching-learning theory supports a learner-centered or collaborative approach as optimal in many situations. However, the literature also supports that teaching style preference is a composite of an individuals' beliefs, values, and personal and professional philosophy. Individuals, as well as the Cooperative Extension organization should assess their own philosophy and values and determine if the preferences are congruent with that philosophy. An assessment of values and philosophy provides a foundation for considering change and future direction. The use of tools such as strategic planning, mission and values clarification, and task forces, are just a few means for guiding an organization and its employees into planned changed.
5. The organization can also assist individuals choosing to make changes or adaption. Personal development plans that provide support and encouragement for growth can be developed with the individual, their supervisors and administrators. In-service training opportunities can be provided for teacher-centered individuals desiring to make changes in their style. Opportunities can be provided for learner-centered individuals desiring to improve their effectiveness should also be made available.
6. A mentoring system, pairing teacher-centered individuals desiring to make adjustments in their personal style, with learner-centered educators could be implemented. Also, because it was found that newer employees, or those with less tenure, were more likely to be teacher-centered, a mentoring system could be beneficial to the individual as well as to the organization. Individuals participating in a mentoring program would have the opportunity to ob-

serve and model behaviors they wish to adopt. Working with a positive role model can influence attitude and increase self-esteem and confidence. Opportunities would be available to share ideas, concerns, problems and successes as well as individuals would have an opportunity for immediate feedback on all phases of the teaching-learning exchange, from planning to evaluation.

Need for Further Study

Compared to teaching children, learning style, and other topics related to understanding and teaching the adult learner, the interest in teaching style of adult educators is still relatively new. It has only been in the past ten to twelve years that instruments have been developed and used to measure teaching style and research studies have been conducted to examine the relationships between teaching style and adult learning. What is known today is still a relatively small portion of the possible amount of information to be learned about teaching style and its impact on the adult learner.

Based on the judgement of the researchers, the following suggestions for further study have been made:

1 This study was only able to account for 16 percent of the total variance in explaining or predicting factors related to perceived teaching style of adults by Ohio Cooperative Extension faculty and program staff. Additional studies looking at different characteristics or combinations of characteristics to try and explain more of the variance should be conducted.

2. Replications of the study should be conducted with Cooperative Extension Services in other states.

3. The study should be adapted and conducted with other formal and informal adult education organizations and institutions.

4. Attitude was a correlate with teaching style preference. Although this is supported more in the literature than the findings of this study, additional studies should be conducted that explore the relationship between educational philosophy and teaching style preference in more depth.

5. The measurements of teaching style preference used in this study were self-reports of behaviors and beliefs. Additional research should be conducted to determine if differences exist between self-reported teaching style (behavior) and actual (observed) teaching style. Also, if differences do exist, what are they?

6. The Van Tilburg/Heimlich Sensitivity-Inclusion measure of teaching style is a new contribution to the literature based on measurement of teaching style of adult educators. Expanded use and data collection using this instrument is encouraged to expand the current body of knowledge.

7. Although Factor Analysis indicates that similarities and overlaps exist between the specific elements and factors that comprise the Van Tilburg/Heimlich Measure and the Principles of Adult Learning Scale, scores were not correlated to the PALS in a way that represents practical significance. This would indicate that the two studies were probably not measuring the same construct of preferred teaching style. Studies looking specifically at the constructs and elements of each of the instruments should be conducted to determine the extent of any similarities and differences that exist.

Summary

A key concern, is not whether or not an individual's teaching style preference is teacher-centered or learner-centered, but in understanding what that interpretation means, what factors influence or contribute to the preference, determining consistency between personal values and philosophy and style preference, adjusting for inconsistencies and learning to adapt method and situational factors to establish the most effective teaching-learning interaction.

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SUMMARY OF RESEARCH SERIES

The Cooperative Extension Service is the world's largest adult education organization providing linkages for dissemination of research-based knowledge to clientele. Extension educators should possess the knowledge and skills needed to anticipate and recognize adult needs and direct learning activities to address those needs. Consequently, the principles of adult education should be evident in the teaching style of extension faculty and staff. This study surveyed 609 Ohio Cooperative Extension Service (OCES) faculty and program staff to determine factors related to teaching style preference as it related to working with adult audiences. It should be of interest to extension administrators and agricultural education teacher educators.

This summary is based on a dissertation by Brenda S. Seevers under the direction of Richard W. Clark. Brenda Seevers was a graduate student in the Agricultural Education Department at The Ohio State University. She is currently an Assistant Professor of Agricultural and Extension Education at New Mexico State University. Dr. Clark is an Associate Professor, Department of Agricultural Education, The Ohio State University. Special appreciation is due to Kathryn R. Treat, New Mexico State University; Richard L. Poling, Clemson University; and Rosemarie Rossetti, The Ohio State University, for their critical review of the manuscript prior to publication.

Research has been an important function of the Department of Agricultural Education since it was established in 1917. Research conducted by the Department has generally been in the form of graduate theses, staff studies, and funded research. It is the purpose of this series to make useful knowledge from such research available to practitioners in the profession. Individuals desiring additional information on this topic should examine the reference cited.

Wesley E. Budke, Associate Professor
Department of Agricultural Education

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